CLAIMS

1. A method for treating a load of woody material made up of stacked elements, particularly a load of wood, by high-temperature heat treatment, using an enclosed treatment space which comprises means for processing a load of woody material that is to be treated (5), this load of woody material delimiting, within said enclosed space, a first volume (8) known as the "raised-pressure chamber", situated upstream of the load that is to be treated (5) and a second volume (9) known as the "recovery chamber", situated downstream of said load, heating means (10) for heating a heat-transfer fluid circulating in said enclosed space (1), circulating means (11) continuously circulating said heat-transfer fluid, monitoring means for monitoring the temperature and moisture content of the enclosed space, regulating means (12) for regulating the temperature and humidity of the enclosed treatment space, and sealing means sealing the top and bottom of the load of material, said method being characterized in that it comprises the steps consisting:

in permanently monitoring and measuring the atmosphere in each of said chambers using the temperature monitoring means then in comparing the data emanating from these monitoring means so as to act simultaneously and uniformly on the altering of the power of the means (10) for heating and, if any, on the cooling, of the heat-transfer gas by the regulating means (12) thus running a heat-treatment cycle, the rise in temperature of which is either linear or in steps, the temperature step levels and their duration being preestablished; this rise in temperature is then governed as a function of the behavior of the load of woody material (5) in terms of its thermal conductivity and as a function of equilibrium between the flow rate and the speed of the heat-transfer fluid between the two chambers (8, 9).

2. The method as claimed in claim 1, characterized in that each of the temperature levels in the treatment cycle is reached when there is equilibrium between the temperature (T1) in the raised-pressure chamber (8) and the temperature (T2) in the recovery chamber (9), and in that equilibrium is determined using the following formulae:

$T1 = T2 - \Delta^\circ C$ when the temperature in the treatment cycle is rising, and
$T2 = T1 + \Delta'^\circ C$ when the temperature in the treatment cycle is falling, where
Δ and Δ' are temperature constants ranging between 5 and 25 degrees Celsius.

3. The method as claimed in claim 2, characterized in that the constants Δ and Δ' are respectively equal to 5 degrees Celsius and 20 degrees Celsius.

4. The method as claimed in any one of the preceding claims, characterized in that progression to a level at least equal to 100 degrees Celsius is permitted only if the volume of the enclosed space (1) contains less than 3% oxygen.

5. The method as claimed in any one of the preceding claims, characterized in that if an incident concerning the heating means (10) is detected above a mean temperature in excess of 120 degrees Celsius, the temperature regulating means (12) are set off until a mean temperature of below 100 degrees Celsius is detected in the chambers (8, 9) before any resumption of the treatment cycle is permitted.

6. The method as claimed in any one of the preceding claims, characterized in that the electronic control means controlling the oven are also connected to computerized equipment that allows all the data from the sensors arranged in the enclosed space to be

printed out during a treatment cycle together with the temperature curves, in real time.

7. The method as claimed in any one of the preceding claims, characterized in that the speed at which the heat-transfer fluid circulates is kept constant in the enclosed treatment space by monitoring said speed and acting on the flow rate of the means that propel said heat-transfer fluid.